

**NOTES:**

**1. MATERIAL SPECIFICATION:**

- 1-1. HOUSING: HIGH TEMPERATURE RESISTANT PLASTIC, UL94 V-0. COLOR: BLACK.
- 1-2. CONTACTS: COPPER ALLOY
- 1-3. MID PLATE: STAINLESS
- 1-4. EMI PLATE: STAINLESS
- 1-5. SHELL: STAINLESS STEEL

**2. PLATING SPECIFICATION:**

- 2-1. CONTACTS: Ni 50u" MIN. UNDER PLATED OVER ALL. Au PLATED ON THE MATING AREA OF CONTACT. (GOLD PLATING THICKNESS FOLLOW THE P/N) GOLD FLASH PLATED ON THE SOLDER AREA. GOLD FLASH PLATING THICKNESS IS NOT REQUIRED.

2-2. SHELL:

- Ni 30u" MIN. UNDER PLATED OVER ALL.

2-3. MID PLATE:

- CLEAR ONLY

2-4. EMI PLATE:

- CLEAR ONLY

**3. MECHANICAL PERFORMANCE,**

- 3-1. INSERTION FORCE: 0.5~2.0kgf.
- 3-2. EXTRACTION FORCE: 0.8kgf~2.0kgf. 0.6kgf~2.0kgf. AFTER DURABILITY TEST.
- 3-3. DURABILITY: 10000 CYCLES.

**4. ELECTRICAL PERFORMANCE,**

- 4-1. CURRENT RATING: 5.0A FOR VBUS; 1.25A FOR GND PIN. 0.25A FOR OTHER.
- 4-2. LLCR: VOLTAGE RATING: 28VΔ VBUS & GND PINS AND OTHER PINS: 40mΩ/PIN MAX. SHIELD: 50mΩ/MAX. LLCR MAX. CHANGE OF ALL PINS: 10mΩ.
- 4-3. INSULATION RESISTANCE: 100MΩ MIN
- 4-4. DIELECTRIC WITHSTAND VOLTAGE, AC 100V FOR 1 MINUTE.

**5. ENVIRONMENTAL PERFORMANCE:**

- OPERATING TEMPERATURE: -30°C~+85°C.
- Storage Temperature Range: -20°C to +60°C.
- Relative Humidity: 15~70%RH
- Storage Life : 6 Months

**6. IR REFLOW:**

- THE PEAK TEMPERATURE ON THE BOARD SHALL BE MAINTAINED FOR 10 SECONDS AT 260°C.

**7. ROHS and HF COMPLIANT.**

**8. Salt Spray: 48H**

Table:

NO.	Part Name	Q'TY	Material	Finish
6	Cover	1PCS	HIGH TEMPERATURE RESISTANT PLASTIC	Color: Black
5	Insertmolding	1PCS	HIGH TEMPERATURE RESISTANT PLASTIC	Color: Black
4	Contact	24PCS	COPPER ALLOY	Contact Area: Ni 50u" MIN. Au See P/N Solder Area: Ni 50u" MIN. & GOLD FLASH
3	Mid Plate	1PCS	STAINLESS STEEL	Clear
2	EMI Plate	2PCS	STAINLESS STEEL	Clear
1	Shell	1PCS	STAINLESS STEEL	Ni 30u" MIN.

UCB51-24BB0 X A N L-H

PIN NUMBER: 24PIN

CONTACT:

- 2: 3U" CONTACT AREA
- 7: 30U" CONTACT AREA

- H: HF PACK:
- L: TAPE REEL
- COLOR: A: Black

HF

A

B

C

D

E

F

G

H

A

B

C

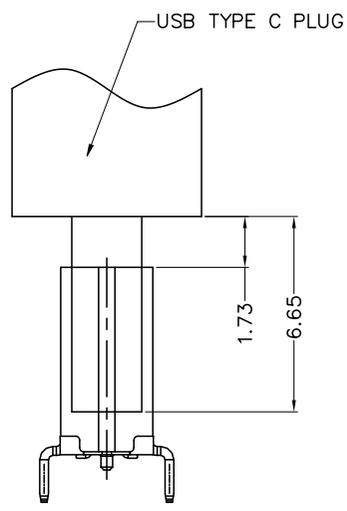
D

E

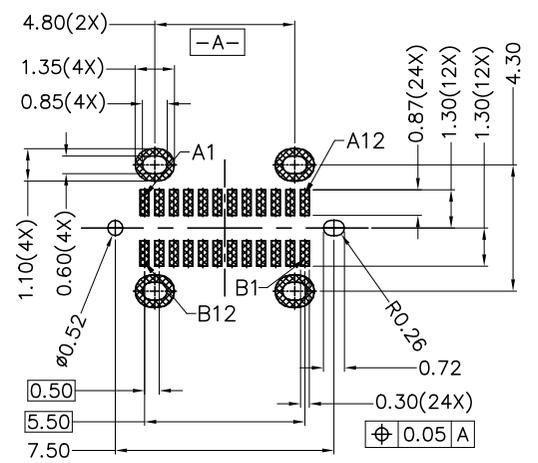
F

G

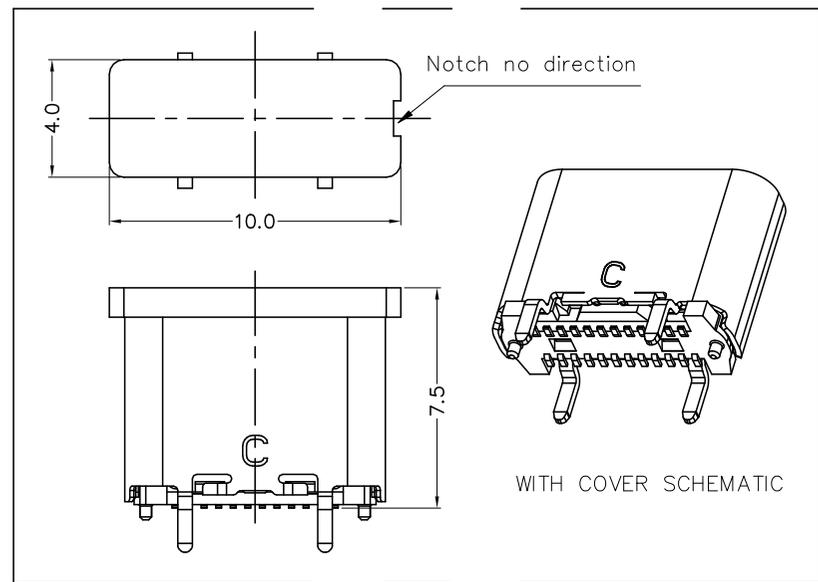
H



FEMALE AND MALE MATCHING DRAWING



RECOMMENDED PCB LAYOUT(TOP VIEW)  
THICKNESS 0.8±0.10MM;DEFAULT TOLERANCE:±0.05



USB TYPE-C PIN ASSIGNMENTS

PIN NUMBER	SIGNAL NAME	PIN NUMBER	SIGNAL NAME
A1	GND	B12	GND
A2	SSTXp1	B11	SSRXp1
A3	SSTXn1	B10	SSRXn1
A4	Vbus	B9	Vbus
A5	CC1	B8	SBU2
A6	Dp1	B7	Dn2
A7	Dn1	B6	Dp2
A8	SBU1	B5	CC2
A9	Vbus	B4	Vbus
A10	SSRXn2	B3	SSTXn2
A11	SSRXp2	B2	SSTXp2
A12	GND	B1	GND

REV.	REVISION RECORD	DATE		GENERAL TOLERANCES		SCALE	NAME	DATE	PART NO.	DWG NO.								
				LINEAR	ANGLES	1:1												
A0	NEW RELEASE	2022. 8. 22				APPROVED	SKY	2024. 01. 31	UCB51-24BB02ANL-H	ENDE05					<b>JCTC</b> <sup>®</sup>			
A1	Newly added electroplating and hf specifications	2023. 10. 18		0. ±0. 35	X° ±2°	DESIGNER	GSQ	2024. 01. 31	TITLE									
A2	Change in rated voltage	2023. 11. 13		0. 0±0. 25	X. X° ±1°	DRAWN	GSQ	2022. 8. 22			USB TYPE C FEMALE,VERTICAL TYPE SHELL H6.50mm							
A3	Newly Added Specifications of 1.5mm Length for Iron Shell Legs	2024. 01. 31		0. 00±0. 15					REV	A3			SHEET	2/2				